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ABSTRACT

Examination of the manneristic behavior (stereotyped or repetitive movement) of 542 blind and 365 sighted children was undertaken. Seventeen types of manneristic behavior were investigated, including head movement, eye poking and rubbing, body rocking, kicking, and posture distortion. Comparison of the behaviors observed in sighted and blind Ss indicated a higher degree of manneristic behavior for blind girls and less for sighted girls than their male counterparts. Existence of specific behaviors in sex of both groups was evaluated. Findings included that four mannerisms (head movement, eye poking and rubbing, clapping and jumping) were found only in blind children, and that sighted Ss ranked higher than blind Ss on all 13 mannerisms. It was concluded that the mannerisms seem to be a human phenomenon rather than one restricted to blindness. (CL)

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A COMPARATIVE STUDY
OF THE
MANNERISTIC BEHAVIOUR
OF BLIND AND SIGHTED CHILDREN

1981

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1. Ahmadi School for the Blind, Aligarh.
2. J. P. M. Higher Secondary School for the Blind, New Delhi.
3. Light House for the Blind Girls, Ahmedabad.
4. Model School for Blind Children, Dehra Dun.
5. Rashtriya Virajanand Andh Kanya Secondary School, New Delhi.
6. Secondary School for the Blind, Ahmedabad.

As this is a comparative study we also received very valuable cooperation from schools for sighted children in Dehra Dun. We owe a deep debt of gratitude to the following schools :

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3. Welham Girls School, Dehra Dun.

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I would specially like to thank Mr. Naresh K. Rai, Psychologist of the Institute and Shri Shriram Mittal, Teacher and other staff members who spent many long and laborious hours in writing this study, preparing the tables, checking them, revising them and doing much else without which the completion of this study would not have been possible. I trust that the publication of this study, which is the result of much hard work on the part of many persons will be of some use to our readers.

January, 1982

LAL ADVANI

FOREWORD

As our services for the disabled began to develop we realise that many complex problems were awaiting scientific investigation and solution. The Government of India, therefore, decided to set up 4 National Institutes with a view to undertaking broad-based problem oriented research into those problems that might promote the integration of the disabled in community life and offer them better techniques and technologies for education and rehabilitation. The National Institute for the Visually Handicapped is one of such Institute charged with the responsibility of undertaking continuing and wide ranging research in the entire area of blindness and visual impairment.

The dominant issue in the education and rehabilitation of the blind is the need to promote their social and emotional integration. Today, blindness arouses highly negative feelings in most people at least during initial encounters. These feelings are strengthened If the behaviour of blind persons is in any way perceived to be bizarre.

It has been known that blind children do engage in meaningless repetitive movements.

These have often been blamed on blindness. The presence of such repetitive behaviour only serves to alienate blind persons psychologically from the rest.

While carrying out a review of literature on the subject we were convinced that adequate evidence did not exist to link repetitive behaviour directly with blindness. Therefore, we undertook a detailed investigation of certain types of manneristic behaviour, comparing their occurrence both in blind and sighted children. The object was to see if these mannerisms were displayed only or largely by blind children. In that event the question of devising adequate and appropriate remedial measures could be examined.

Fortunately, however, the study carried out by us has completely demolished the belief that the majority of repetitive movements are linked with blindness. In several situations sighted children engaged in them more often than did blind children. This evidence alongwith the discovery that there are sex and situational differences goes to strongly establish the fact that blind children are physiologically and psychologically no different from other children. In fact, only a very small percentage of blind children in the study showed manneristic behaviour. The study has also thrown some light on the possible remedial measures.

We trust that the findings of this study will help dispel some at least of the long held myths about blindness and would carry us a step forward in our effort to integrate blind children at school and in various other settings.

This is an initial attempt. Many more refined studies will be needed to investigate this issue in depth. I hope that this initial endeavour will set the stage for further studies by us as well as by other organisations equally interested in doing away with every vestige of behaviour that may reinforce the separateness of the blind.

LAL ADVANI
Director

National Institute for the Visually Handicapped
Ministry of Social Welfare
Rajpur Road, DEHRA DUN

January 1982

CHAPTER 1

STATEMENT OF THE PROBLEM

Through centuries of tradition and cultural programming blind people have been set apart from the community at large. Cultural stereotypes have invested them with sharply contrasting powers of mind and body. This is so largely because stereotypes are almost invariably derived from misinformation. They are perpetuated by the segregation of the blind from every day activity.

Until about 200 years ago when the first school for the blind was set up in Paris, blind children were rarely believed to be educable, though examples were not lacking of blind students who had distinguished themselves in diverse fields. Those blind persons who had attained great academic heights were looked upon as exceptions. Even during the last 200 years blind children, specially in the developing world, have been educated in special residential schools. Few indeed are those who believe in the possibility of the fruitful intermingling of blind and sighted children in the educational setting or the play situation.

Many myths and misconceptions surround blindness. These are unconsciously handed down from generation to generation and have sometimes found their way into national literature. The principal reason for their continuance is the tenuous interaction taking place between blind and sighted persons in most countries. An air of mystery, therefore, attaches to blindness.

Attempts at integrating blind children in school date back to the turn of the present century. These efforts have, however, been feeble and sporadic and have achieved varying degrees of success in different countries. In the developing world integration at school is still a novel phenomenon. The philosophy of the asylum pervades. Blind children are housed, fed, clothed and educated in special schools and the parents are rarely expected to contribute. The thread of affection that normally binds parents and their offsprings is snapped or made so brittle that it loses its emotional significance both for the child and the parent. It is not surprising, thererfore, that parents too often subscribe to popular myths and misconceptions.

The physiological chasm that separates the blind and the sighted is created and sustained by the tendency of many sighted persons to shrink from interaction with the blind. The most eloquent testimony of the disastrous consequences of this unconscious shrinking is provided by the employment situation in India. Over the years it has become abundantly clear that the average employer even if he is socially inclined and intellectually convinced that a person without sight can fill the bill, prefers to appoint a disabled person with sight.

The reasons for the unconscious feeling of unease experienced by many sighted persons in initial encounters with the blind are many and complex. The highly negative connotations attaching to darkness and the image of the helpless blind built over many centuries may make some people ill at ease in their encounters with blind persons. A study in depth of this phenomenon is outside the scope of this work. Yet, it is important to realise that any behaviour on the part of the blind which accentuates their separateness can only deepen the psychological gulf between the blind and the sighted.

The effects of prolonged institutionalisation have been well documented. Most blind children in this country have spent long periods in institutions away from wholesome family interactions. As a consequence, they have sometimes demonstrated maladaptive behaviour. In the popular mind this tends to be closely associated with blindness rather than with the social structure in which they are placed. Thus, the behaviour of blind persons themselves is of crucial importance in building a healthy image in the popular mind about them.

For effective integration removal of every sign that might be interpreted as bizarre behaviour is of great importance. But strangely enough, it is through integration that the process of building up a healthy image of the blind can be achieved. Some recent experiences in this country of integrating blind and sighted children in the relaxed recreational setting have convincingly shown how blind and sighted children can intermingle, overcoming and forgetting every sense of difference.

But literature on blindness shows how manneristic behaviour in blind children has been attributed to blindness. In fact, mannerisms in the blind have been styled as "blindisms". A peculiar phenomenon in the field of blindness is that any behaviour shown by a blind person is almost unthinkingly believed to be the result of blindness and is unconsciously regarded as a class characteristic of blind people.

Manneristic behaviour occurs frequently in retarded and emotionally disturbed children. Indeed, it occurs in almost all children. But this fact has not received adequate emphasis in literature on blindness. The presence of manneristic behaviour stigmatizes blind persons and blocks their social and emotional integration.

Therefore, in the wide ranging search for steps to promote integration, this Institute decided to undertake a study of manneristic behaviour in blind children. The underlying conviction that mannersims are a human phenomenon persuaded us to make a comparative study of blind and sighted children in the hope that this study might shed some light on the prevalence and incidence of manneristic behaviour both in blind and sighted children and thus, contribute to removing the stigma attaching to manneristic behaviour in blind children.

We realised that a study of mannerisms would involve looking at a wide range of behaviours. For example, the May 1979 issue of the "**JOURNAL OF VISUAL IMPAIRMENT AND BLINDNESS**" listed no fewer than 34 different types of mannerisms. We believed, however, that a limited study was likely to yield quicker and better results than a widely diffused one. Moreover, we also found the list of mannerisms given by the "Journal of Visual Impairment and Blindness" to be incomplete in some respects and too detailed in others. We, therefore, arrived at a list of 17 forms of manneristic behaviour. Accordingly, we conducted a Pilot Study in the Model School for Blind Children, a constituent unit of this Institute, to obtain some idea of types of the manneristic behaviour commonly present in blind children in our culture.

Lack of environmental stimulation has been widely implicated in blindness literature as a probable cause of stereotypic behaviour. Manneristic behaviour has also often been regarded as a mechanism for coping with anxiety and frustration. It is sometimes looked upon as a tension reducing mechanism and from that stand point an adaptive behaviour. Thus, what may be a psychologically adaptive behaviour for blind children may be seen as a socially deviant behaviour by the rest. It is this conflict that needs to be resolved. It also brings out clearly the absolute necessity of the blind individual to adjust to the norms of a society geared to the needs of the sighted.

If one of the functions of manneristic behaviour is to serve as a tension reducing mechanism, it is likely that the occurrence of manneristic behaviour will vary in different situations. It was felt, therefore, that it would be worthwhile to limit this study to certain well defined situations. Accordingly, it was decided to study manneristic behaviour both of blind and sighted children in the following four situations :

(1) The Dining-Room.

(2) The Class-room.

(3) Play.

(4) The Dormitory.

A review of literature on blindness suggested that early stimulation and mother-child relationship were closely associated with the occurrence and persistence of manneristic behaviour. Since cultural factors play a significant role in determining the early handling of children, it was decided to conduct the study in six schools in Ahmedabad, Aligarh, Dehra Dun and Delhi. A broader study covering a wider geographical region and range of cultural factors could be planned at a later date.

No study of manneristic behaviour would be of practical value unless an effort was also made to identify remedial techniques. To do so we depended on teacher observation.

We hope the results of this study will shed some light on the prevalence of manneristic behaviour in blind and sighted children and could be the spring-board for further investigation into this vitally important area of the education of the visually handicapped. If this study serves to forward by one step the achievement of a social integration for the blind, it will have achieved the purpose for which it was undertaken.

Limitations : We would like to mention the following limitations of the study:

(1) The number of blind and sighted subjects was not equal. Similarly the ratio of boys and girls both in the blind and in the sighted groups as well as in the various situations varied. We studied 542 blind and 365 sighted children.

(2) The blind and sighted children could not be matched for income. However even though the majority of blind children come from low income groups, for many years they stay in schools for the blind which provide an environment more or less equivalent to that the sighted children in the study had. Thus, oblique matching could be said to have been achieved.

(3) The study is based on data obtained from observation. Though the observers were given an orientation course, it cannot be gainsaid that there might be some observation error. Such an error could only be minimised by filming the movements of the subjects in various situations. This could be attempted in a later study.

Terminology : In the blindness literature repetitive movements of different kinds have been variously described as "blindisms", "mannerisms", "stereotypies", "stereotypic behaviour" and so on. We have chosen not to use the word "blindisms" because it suggests a direct connection between blindness and repetitive behaviour. There is no adequate evidence to suggest that blindness *per se* is responsible for non-goal directed repetitive behaviour. We have, therefore, used the expressions "manneristic behaviour" or "stereotypic behaviour" or "mannerisms" interchangeably.

Definitions : The definition of manneristic behaviour is beset with numerous problems. Several definitions are found in blindness literature as well as in books and journals on psychiatry and pediatrics. For our study we have adopted the following definition based primarily on the one suggested by Eichel in the May 1979 issue of the "*Journal of Visual Impairment and Blindness*" but slightly modified for our purpose :

> "Any repetitive or stereotyped movement that is not apparently directed towards the attainment of any clearly discernible goal."
>
> Manneristic behaviour is generally looked upon as non-instrumental behaviour.

A word about this definition may be in order. We have preferred to use the expression "clearly discernible" largely because there is mounting evidence to suggest that manneristic behaviour may in some cases be a form of adaptive behaviour designed to reduce the tensions created by poverty of environmental stimulation. Moreover, PLAGET suggests that in the first year the greatest step forward for the child is to move from bodily to environmental stimulation. Since in the case of the blind child environmental stimulation is usually diminished, the child may continue to use manneristic behaviour characteristic of an earlier stage in development. While manneristic behaviour may not be age appropriate, it cannot at once be described as a purely non-adaptive mechanism even if it is socially unacceptable.

For the sake of clarity it would be useful to define the 17 mannerisms investigated in this study :—

1. Head Movement	This includes all forms of head movement including nodding, rolling and shaking.
2. Face Contortion	Any twisting or mis-shaping of the face as sometimes seen in strong emotion.
3. Tongue Wagging	Any movement of the tongue in alternate or opposite directions.
4. Clapping	Striking together of the two hands.
5. Eye Poking and Rubbing	Frequent contact of the eye with the fingers or back and fro movement of the open or closed hands over the eyes.
6. Finger Manipulation	Contacting any of the fingers with any of the other fingers in any order.
7. Arm Shaking	Flapping one or both arms backwards and forwards or sideways.
8. Thumb Sucking	Prolonged retention of the thumb in the mouth.
9. Nail Biting	Persistent contact of the nails with the teeth and slow clipping.
10. Jumping	Repeated vertical motion where the feet break contact with the floor while standing.

11. Body Rocking	Movement of the trunk backwards and forwards or sideways while standing or sitting.
12. Swaying	Horizontal movement of the body usually while standing.
13. Foot Shaking	Moving the foot in any direction while standing or sitting.
14. Kicking	Moving the legs horizontally with a bursting motion in a backward or forward motion.
15. Stamping	Unilateral moving of the legs in a vertical direction contacting the floor with force.
16. Leg Shaking	Moving the legs in any direction usually while sitting.
17. Posture Distortion	Bending the head so low that the chin touches the upper part of the chest bone or bending upper part of the trunk.

Aetiology : We do not at this stage have a clear understanding of how and why manneristic behaviour develops and persists. Nevertheless, in the literature numerous suggestions have been made both about possible causes and about the nature of manneristic behaviour. These suggestions could be summed up as follows:

1. Manneristic behaviour is the result of environmental and social deprivation.
2. Stereotypic behaviour is used by the child for self stimulation and as a substitute for physical activity.
3. Such behaviour is very similar to the behaviour of autistic children.
4. Some others suggest that this is a form of auto-erotic behaviour and results often from long persisting ego centricity.
5. It is a defence mechanism against frustration and stress.
6. The persistence of manneristic behaviour could be traced to the lack of visual feed-back making imitation almost impossible.
7. Some manneristic behaviour may give pleasure and may thus be reinforced by repetitions.
8. It is a form of regression to an earlier stage of development resulting in anti exploratory behaviour.
9. Mannerisms may be a response to disorganised and conflicting stimuli from the environment.
10. Some authors suggest that while at some stage mannerisms may have been forms of adaptive behaviour, they persist through motor perseveration.
11. Some authors look upon mannerisms as a sign of reactive behaviour disorder on the verge of internalisation.
12. Eye poking, which, is fairly common, is sometimes looked upon as an oculodigital phenomenon aimed at reducing photo phobia or creating retinal phosphenes.

It is evident from the foregoing that stereotyped behaviour is by no means a simple phenomenon nor is its aetiology crystal clear. Institutionalisation has also sometimes been held responsible for the development and persistence of manneristic behaviour. A great deal of research is needed to uncover the causes and to devise remedial measures.

Remedial Measures

Since the nature and causes of manneristic behaviour in blind children are poorly understood, there is no general agreement in the literature on effective remedial measures. Various authors have, however, proposed the following:—

1. Punishment or negative reinforcement.
2. Relaxation.
3. Conscious and purposeful exaggeration and repetition of the offending mannerisms.
4. Positive reinforcement.
5. Giving the child some substitute activity.
6. Increase in the child's body awareness.
7. Deliberate and sustained practice of desirable responses.

8. Constant reminders.

9. Encouraging the child to engage in spontaneous exploration of the environment.

10. Ensuring a secure mother-child relationship.

11. Appropriate and conscious instruction designed to help the child lea · effective instrumental behaviours.

12. Frequent admonitions.

Early intensive stimulation has been proposed as a possible preventive measure. But in case of remedial measures there is not enough evidence in favour of or against adoption of any of these measures. The entire field of the remediation of manneristic behaviour is open for exploration.

CHAPTER 2

METHODOLOGY AND PROCEDURE

Hypothesis : Our hypothesis for the study was that no significant differences would be found between blind and sighted children when placed in a similar or identical situation. In other words, that manneristic behaviour could not be traced directly to blindness.

Sampling : The principal criterion for choosing our sample was linguistic similarities. We chose schools for the blind and schools for sighted children in areas having strong linguistic affinity. The reason for this was that it has been shown that language profoundly influences child rearing practices as well as mother-child relationships.

In the blindness literature both mother-child relationships and the lack of environmental and social stimulation have been implicated in the development and persistence of manneristic behaviour. We thought, therefore, that a purposive sample chosen from schools located in areas with strong linguistic affinity would serve the purpose of this study.

Characteristics of the Subjects : As pointed out in an earlier section we studied 6 schools for the blind in Ahmedabad, Aligarh, Dehra Dun and Delhi. We could not match the subjects for age. They were, however, matched for their educational level. All students in 6 schools between sixth and tenth classes were observed. The number of blind subjects was 542 (314 boys and 228 girls).

Similarly, sighted students were also matched for their educational level. All students from the sixth to the tenth class in two public schools and one Central School in Dehra Dun were observed. The number of sighted subjects observed was 365 (185 boys and 180 girls).

We have indicated above the total number of blind and sighted subjects who were observed. The number varied, however, in different situations. The following table shows the distribution of blind and sighted subjects in different situations :

TABLE 2.1

Sl. No.	Situation	Blind Subject			Sighted Subject		
		Boys	Girls	Total	Boys	Girls	Total
1.	Dining room	314	78	392	51	43	94
2.	Class Room	314	228	542	185	180	365
3.	Play	185	98	283	86	32	118
4.	Dormitory	274	78	352	25	8	33

Procedure : To start with, three trained teachers of the blind were requested to conduct a Pilot Study in the Model School for Blind Children. They were given a short orientation course in the process of observation and identifying specific forms of manneristic behaviour. They then visited the 6 schools for the blind in question and observed the students in various situations. They made extensive records of their observations.

Observation of sighted students was carried out by the Psychologist assisted by another sighted staff member. However, both these persons were involved in the Pilot Study and were, therefore, familiar with the norms adopted for observing various forms of stereotypic behaviour.

The observers were not asked to record the precise frequency of each mannerism. They were only asked to indicate the dominant mannerisms and the number of children who showed such behaviour. The purpose obviously was to identify the most pronounced forms of manneristic behaviour.

CHAPTER 3

COMPARISON OF MANNERISTIC BEHAVIOUR BETWEEN SIGHTED AND BLIND CHILDREN

Of the 17 mannerisms observedin this study 4 were found only in blind children. These will be discussed in a subsequent section. At this stage, we present data regarding 13 mannerisms observed both in blind and sighted children.

No manneristic behaviour was observed in sighted children at play. We are, therefore, restricting the comparison to three situations, namely, the dining room situation, the class room situation and the dormitory situation.

Table 3.1 shows the number of blind and sighted children studied in each situation :

TABLE 3.1

S. No.	Situtation	Blind Subject			Sighted Subject		
		Boys	Girls	Total	Boys	Girls	Total
1.	Dining Room	314	78	392	51	43	94
2.	Class Room	314	228	542	185	180	365
3.	Dormitory	274	78	352	25	8	33

In Table 3.2 we compared blind and sighted children on all the 13 mannerisms observed in them in the dining room situation :

TABLE 3.2

	Blind Subject			Sighted Subject		
	Boys	Girls	Total	Boys	Girls	Total
Mannerisms found	41	12	53	20	8	28
Percentage	13.06	15.38	13.52	39.22	18.61	29.79

The results presented in the foregoing table appear to be most interesting and significant. Both sighted boys and girls ranked higher in the display of the 13 mannerisms taken together than blind boys and girls. But blind girls ranked higher than blind boys while sighted girls ranked lower than sighted boys. Differences between blind and sighted children were statistically significant at both 0·05 and 0·01 levels of confidence. The results should help demolish the belief that mannerisms are the direct consequence of blindness. They should help all concerned view this phenomenon as a human manifestation transcending the circumscribing effects of visual loss.

Table 3.3 presents similar data in the class room situation.

TABLE 3.3

	Blind Subject			Sighted Subject		
	Boys	Girls	Total	Boys	Girls	Total
Mannerisms found	77	99	176	86	57	143
Percentage	24.52	43.42	32.47	46.49	31.67	39.18

The results shown in the foregoing table are very similar to those in the previous one. Here again while blind girls showed more manneristic behaviour than blind boys, sighted girls showed it

less than sighted boys. The higher ranking of sighted children was statistically significant at 0·05 level of confidence.

Table 3.4 presents similar data in the dormitory situation.

TABLE 3.4

	Blind Subject			Sighted Subject		
	Boys	Girls	Total	Boys	Girls	Total
Mannerisms found	119	28	147	8	0	8
Percentage	43·43	35·90	41·76	32.0	Nil	24·24

It will be seen that the trend of the data in the foregoing Table is different. While blind girls ranked lower than blind boys, sighted girls showed no manneristic behaviour in this situation. In the dormitory situation sighted children showed much fewer mannerisms than did blind children. The difference was significant at 0·05 level of confidence.

Table 3·5 gives the mean percentage of the occurrence of manneristic behaviour in all the 3 situations in blind and sighted children.

TABLE 3·5

	Blind Subject			Sighted Subject		
	Boys	Girls	Total	Boys	Girls	Total
Mean %	27·03	31·53	29·25	39·23	16·76	31·07

It is clear from the foregoing Table that the predominant trend was for blind girls to show slightly more manneristic behaviour than blind boys. However, sighted girls displayed less manneristic behaviour than sighted boys. On the whole, however, sighted children ranked higher, reinforcing the earlier view that manneristic behaviour cannot be directly linked with blindness.

All the comparative data about blind and sighted children are graphically presented in Fig.3.1.

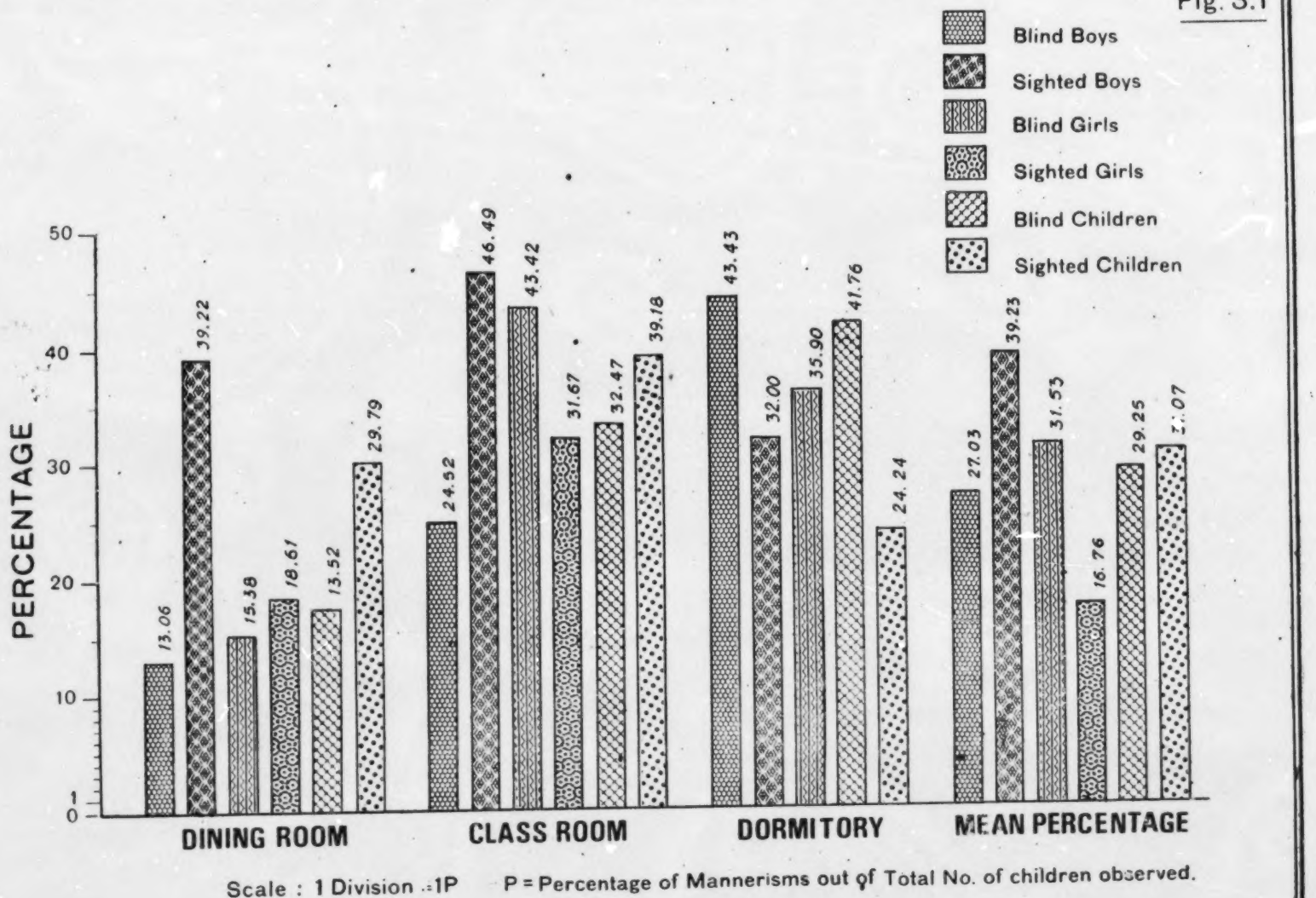
We now proceed to give the position with regard to individual mannerisms occurring among blind and sighted children in different situations. The percentages given are calculated on the basis of the number of boys and girls who displayed a particular mannerism.

In Table 3·6 are given comparative data regarding the occurrence of various mannerisms in blind and sighted children in the dining room situation.

TABLE 3·6

Group	Mannerism	Blind Subject				Sighted Subject			
		Boys		Girls		Boys		Girls	
		No.	%	No.	%	No.	%	No.	%
BLIND BOYS	Arm Shaking	8	19·51	—	—	—	—	—	—
	Kicking	1	2·44	—	—	—	—	—	—
BLIND GIRLS	Finger Manipulation	—	—	2	16·67	—	—	—	—
SIGHTED BOYS	Nail Biting	—	—	—	—	7	35·00	—	—
	Swaying	—	—	—	—	1	5·00	—	—
SIGHTED GIRLS	NIL	—	—	—	—	—	—	—	Nil
BLIND BOYS BLIND GIRLS	Face Contortions	3	7·32	1	8·33	—	—	—	—
BLIND BOYS SIGHTED BOYS	Body Rocking	4	9·76	—	—	10	50·00	—	—
BLIND BOYS SIGHTED GIRLS	Stamping	1	2·44	—	—	—	—	4	50·00
BLIND BOYS SIGHTED BOYS SIGHTED GIRLS	Foot Shaking	2	4·88	—	—	1	5·00	3	37·50
BLIND BOYS BLIND GIRLS SIGHTED BOYS	Leg Shaking	8	19·51	3	25·00	1	5·00	—	—
BLIND BOYS BLIND GIRLS SIGHTED GIRLS	Posture Distortion like head bent low	14	34·15	6	50·00	—	—	1	12·50

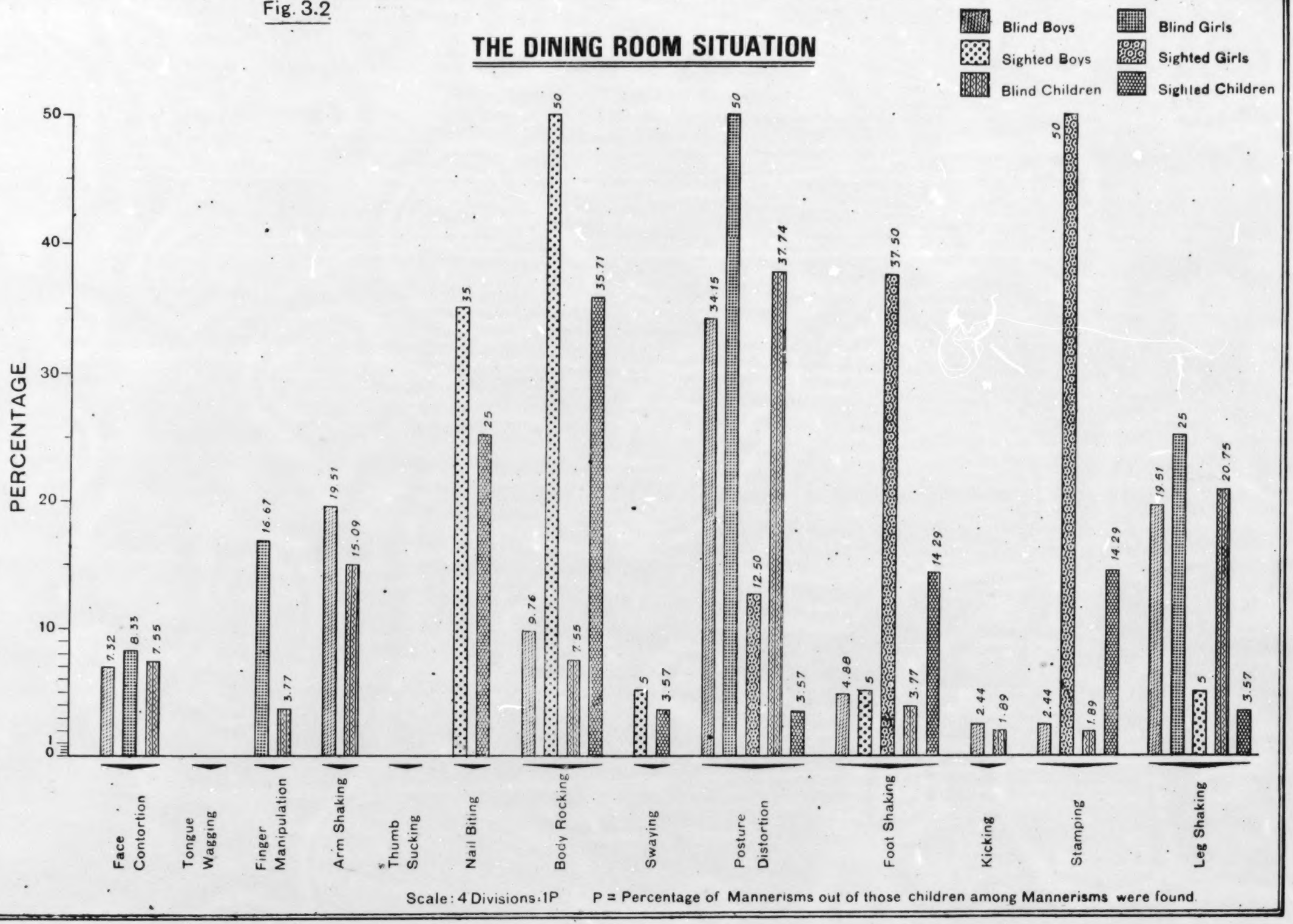
Fig. 3.1



Scale : 1 Division = 1P P = Percentage of Mannerisms out of Total No. of children observed.

Fig. 3.2

THE DINING ROOM SITUATION



Scale: 4 Divisions: 1P P = Percentage of Mannerisms out of those children among Mannerisms were found.

The data in the preceding table are of considerable interest. Two mannerisms, i.e., tongue wagging and thumb sucking, did not occur in this situation in any group. On the other hand, blind children showed 4 mannerisms, i.e., face contortion, arm shaking, finger manipulation and kicking which were not found in sighted children. But sighted children showed two forms of stereotypic behaviour, namely, nail biting and swaying which were not seen in blind children in this situation. Therefore, when we observe a set of mannerisms in a given group we cannot establish a positive or negative association with the presence or absence of sight.

The comparative data on all the 13 mannerisms are graphically shown in Fig. 3·2.

This is reinforced by the fact that the application of test showed differences significant for the blind in 3 instances and the sighted also ranked higher in 3 other cases. Table 3·7 presents data in this regard.

TABLE 3·7

Sl. No.	Mannerism	Blind Children *Vs.* Sighted Children	In favour of
1.	Nail Biting	Significant at 0·05 and 0·01 level	Sighted Children
2.	Posture Distortion like Head Bent Low	,,	Blind Children
3.	Body Rocking	,,	Sighted Children
4.	Arm Shaking	Significant at 0·05 level	Blind Children
5.	Stamping	,,	Sighted Children
6.	Leg Shaking	,,	Blind Children

All the 13 mannerisms occurred in some group or the other in the class room situation. One of them namely arm shaking was found in blind children. The rest were spread across the board.

Table 3·8 presents the groupwise data.

TABLE 3·8

GROUP	Mannerism	Blind Subject				Sighted Subject			
		Boys		Girls		Boys		Girls	
		No.	%	No.	%	No.	%	No.	%
BLIND BOYS	—	—	—	—	—	—	—	—	—
BLIND GIRLS	—	—	—	—	—	—	—	—	—
SIGHTED BOYS	—	—	—	—	—	—	—	—	—
SIGHTED GIRLS	—	—	—	—	—	—	—	—	—
BLIND BOYS BLIND GIRLS	Arm Shaking	7	9·09	5	5·05	—	—	—	—
BLIND GIRLS SIGHTED BOYS	Rolling & Swaying	—	—	1	1·01	2	2·33	—	—
BLIND BOYS	Tongue Wagging	4	5·19	1	1·01	2	2·33	—	—
BLIND GIRLS	Body Rocking	9	11·69	5	5·05	10	11·63	—	—
SIGHTED BOYS	Kicking	1	1·29	2	2·02	1	1·16	—	—
BLIND BOYS	Face Contortion	5	6·49	3	3·03	1	1·16	1	1·75
BLIND GIRLS SIGHTED BOYS	Finger Manipulation	11	14·28	9	9·09	10	11·63	4	7·02
SIGHTED GIRLS	Thumb Sucking	2	2·60	10	10·10	4	4·65	8	14·04
	Nail Biting	2	2·60	3	3·03	13	15·12	20	35·09
	Foot Shaking	4	5·19	25	25·25	8	9·30	9	15·79
	Stamping	5	6·49	4	4·04	4	4·65	2	3·51
	Leg Shaking	12	15·58	15	15·15	16	18·60	7	12·28
	Posture Distoration like head bent low	15	19·48	16	16·16	15	17·44	6	10·53

A study of the groupwise data shown in the above Table suggests that 9 out of 12 mannerisms that cut across the various groups were found to be more pronounced in blind children. These were face contortion, posture distortion, tongue wagging, body rocking, finger manipulation, foot shaking, kicking and stamping. However, one mannerism, namely, nail biting seems to tilt the whole

balance in favour of the sighted. These mannerisms occurred only in a small number of blind children.

The data obtained in this situation are shown graphically in Fig. 3·3.

Statistically significant differences between the blind and sighted were found only in the case of two mannerisms, namely, arm shaking favouring the blind and nail biting favouring the sighted. These differences were significant at 0·05 and 0·01 levels of confidence.

All the 13 mannerisms in question were found in the dormitory situation in some group or the other. Table 3·9 presents the groupwise data.

TABLE 3·9

GROUP	Mannerism	Blind Subject				Sighted Subject			
		Boys		Girls		Boys		Girls	
		No.	%	No.	%	No.	%	No.	%
BLIND BOYS	Kicking	3	2·52	—	—	—	—	—	—
BLIND GIRLS	—	—	—	—	—	—	—	—	—
SIGHTED BOYS	—	—	—	—	—	—	—	—	—
SIGHTED GIRLS	—	—	—	—	—	—	—	—	—
BLIND BOYS / BLIND GIRLS	Finger Manipulation	22	18·49	4	14·29	—	—	—	—
	Thumb Sucking	4	3·36	1	3·57	—	—	—	—
	Body Rocking	8	6·72	4	14·29	—	—	—	—
	Swaying	8	6·72	1	3·57	—	—	—	—
	Stamping	4	3·36	3	10·71	—	—	—	—
	Posture Distortion like head bent low	13	10·92	5	17·86	—	—	—	—
BLIND BOYS / BLIND GIRLS / SIGHTED BOYS	Face Contortion	12	10·08	1	3·57	2	25·00	—	—
	Tongue Wagging	4	3·36	1	3·57	2	25·00	—	—
	Arm Shaking	15	12·61	1	3·57	1	12·50	—	—
	Nail Biting	7	5·88	3	10·71	1	12·50	—	—
	Foot Shaking	9	7·56	1	3·57	1	12·50	—	—
	Leg Shaking	10	8·40	3	10·71	1	12·50	—	—

A look at the foregoing table brings out some interesting findings. 7 mannerisms, namely, face contortion, body rocking, swaying, finger manipulation, thumb sucking, kicking and stamping were also found to be more frequent in blind children. The remaining 6 occurred both in blind and sighted children. Sighted girls, however, showed no mannerism at all in this situation.

The data from this situation are exhibited in Fig. 3-4.

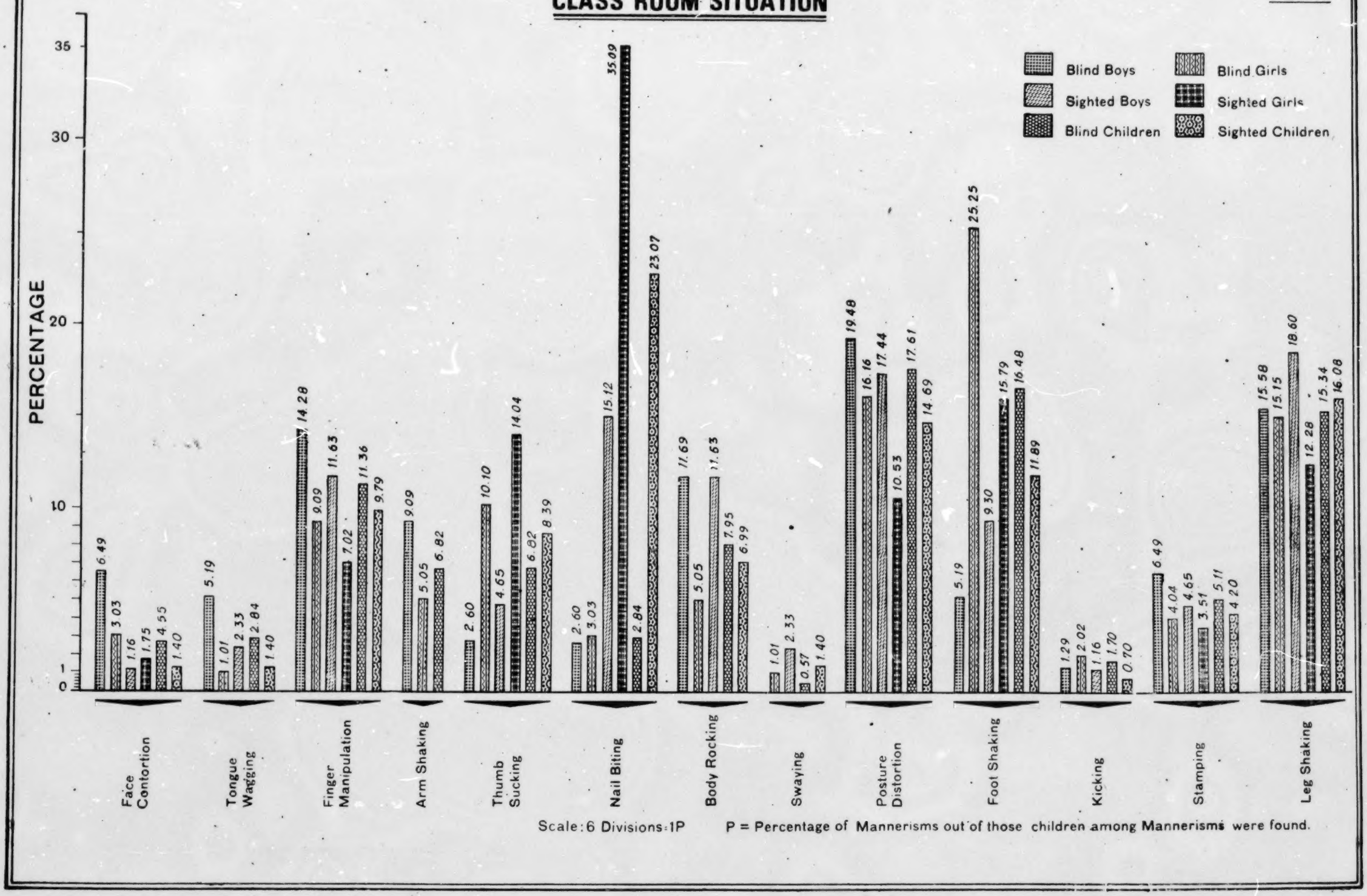
The differences between sighted and blind children were statistically significant only in regard to one mannerism namely, tongue wagging. The difference was significant at both 0·05 and 0·01 levels of confidence.

It is by no means easy to take an overall view for the simple reason that it is very likely that the same children or a large majority of them appeared in all the 3 or at least in more than one situations. Yet, an overall view can be taken if we count the number of observations made. On this basis 1286 observations were made in schools for the blind. 492 observations were made in schools for the sighted. Of 1286 observations of the blind, mannerisms were seen in 376 or 29.24%. Of 492 observations of the sighted, mannerisms were seen in 179 or 36·38%. The differences are found to be significant at both the levels of confidence in favour of sighted children. Based on these observations, the data obtained are given in Table 3·10.

However, as was pointed out earlier 4 mannerisms, namely, head movement, clapping, eye poking and rubbing and jumping were found only in the blind. If we take all the mannerisms

CLASS ROOM SITUATION

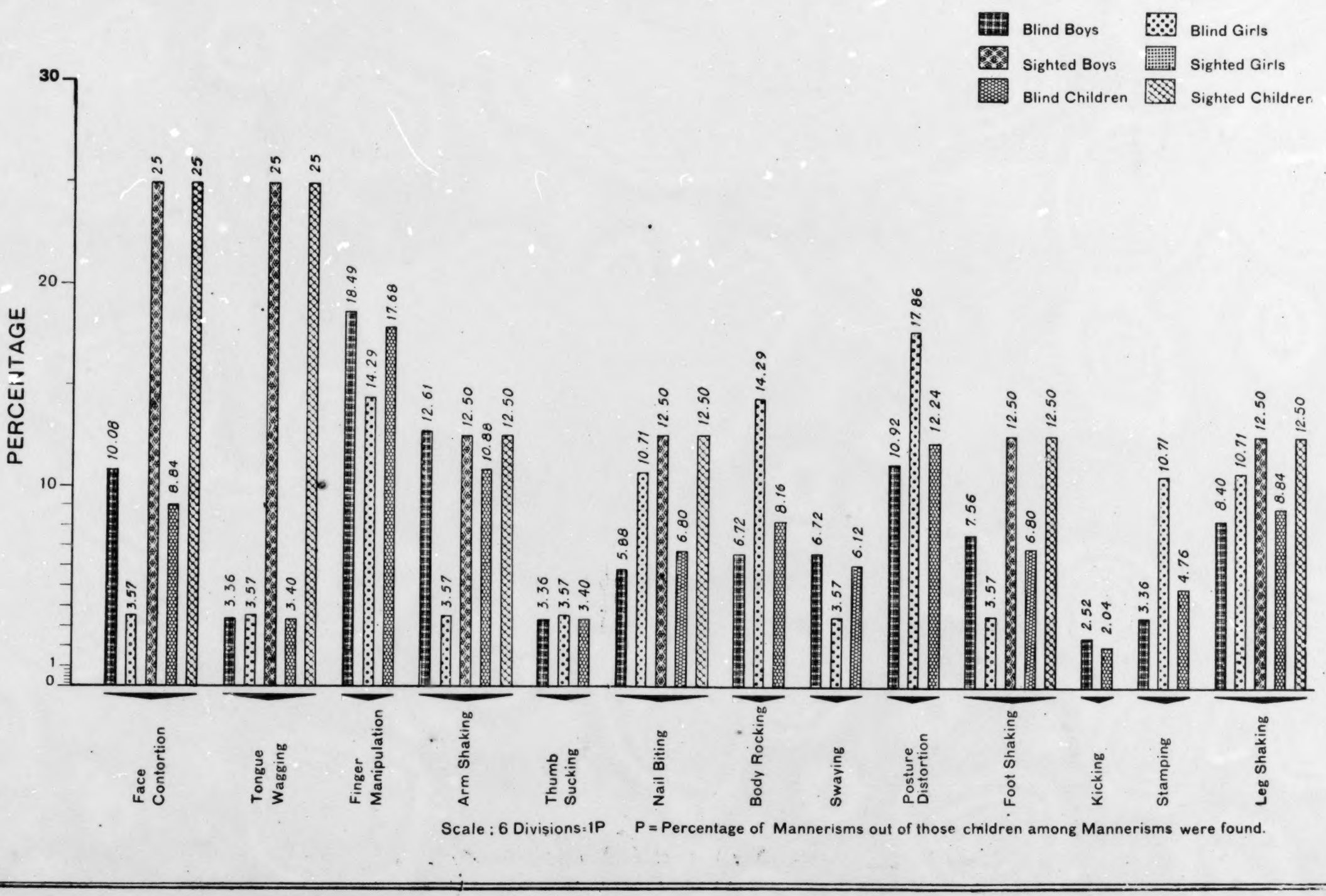
Fig. 3.3



Scale: 6 Divisions = 1P P = Percentage of Mannerisms out of those children among Mannerisms were found.

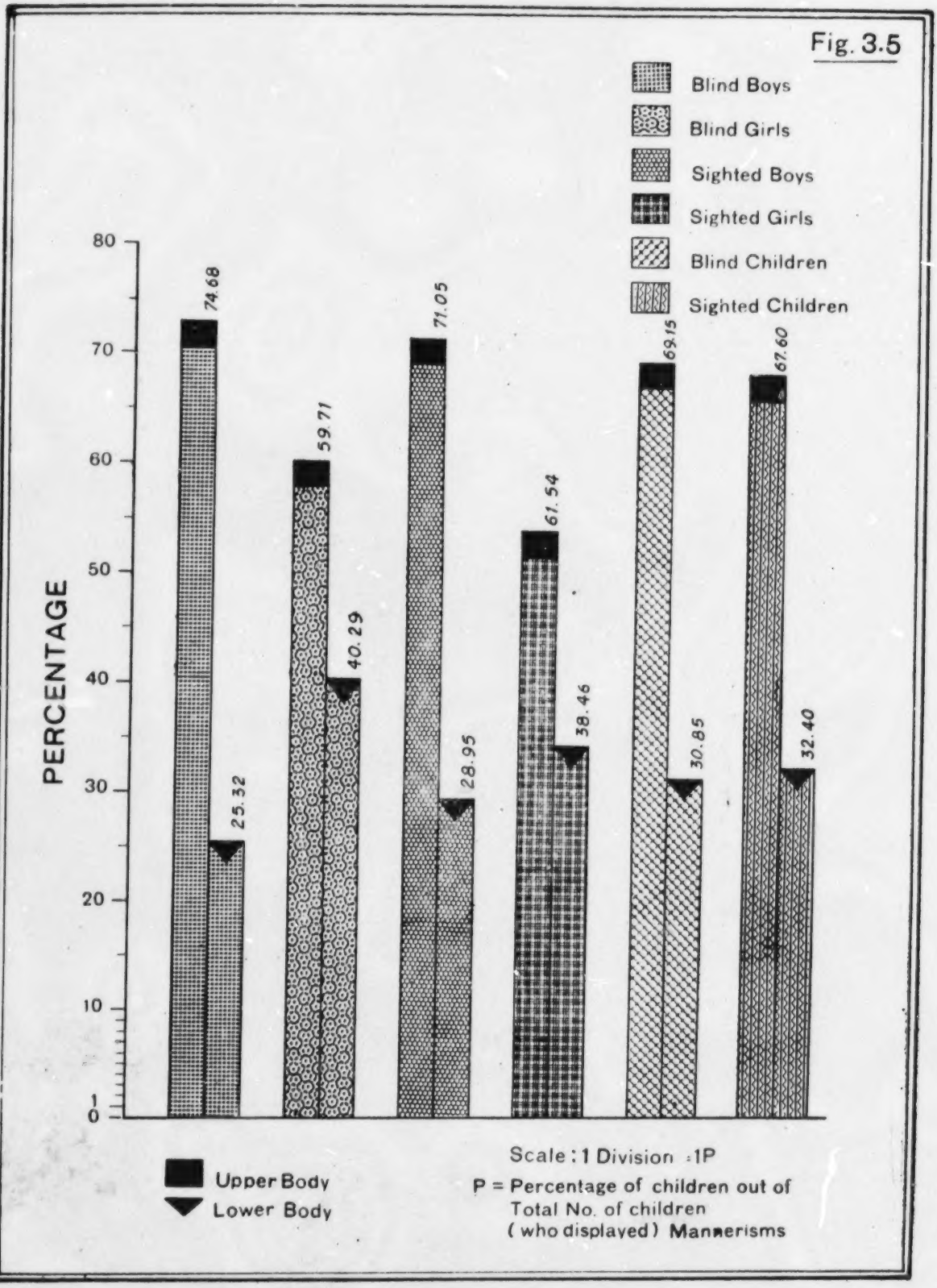
Fig. 3.4

DORMITORY SITUATION



Scale : 6 Divisions=1P P = Percentage of Mannerisms out of those children among Mannerisms were found.

Fig. 3.5


Blind Boys
Blind Girls
Sighted Boys
Sighted Girls
Blind Children
Sighted Children
PERCENTAGE
80
70
60
50
40
30
20
10
1
0
74.68
25.32
59.71
40.29
71.05
28.95
61.54
38.46
69.15
30.85
67.60
32.40
Upper Body
Lower Body
Scale : 1 Division = 1P
P = Percentage of children out of Total No. of children (who displayed) Mannerisms

together we find that out of 1286 observations of the blind, mannerisms were seen in 539 working out to 41·91%.

TABLE 3·10

GROUP	Mannerisms	Blind Subject				Sighted Subject			
		Boys		Girls		Boys		Girls	
		No.	%	No.	%	No.	%	No.	%
BLIND BOYS	—	—	—	—	—	—	—	—	—
BLIND GIRLS	—	—	—	—	—	—	—	—	—
SIGHTED BOYS	—	—	—	—	—	—	—	—	—
SIGHTED GIRLS	—	—	—	—	—	—	—	—	—
BLIND BOYS	Tongue Wagging	8	3·38	2	1·44	4	3·51	—	—
BLIND GIRLS	Arm Shaking	30	12·66	6	4·32	1	0·88	—	—
SIGHTED BOYS	Body Rocking	21	0·86	9	6·47	20	17·54	—	—
	Swaying	8	3·38	2	1·44	3	2·63	—	—
	Kicking	5	2·19	2	1·44	1	0·88	—	—
BLIND BOYS	Face Contortion	20	8·43	5	3·60	3	2·63	1	1·54
BLIND GIRLS SIGHTED BOYS	Finger Manipulation	33	13·92	15	10·80	10	8·77	4	6·15
SIGHTED GIRLS	Thumb Sucking	6	2·53	11	7·92	4	3·51	8	12·30
	Nail Biting	9	3·80	6	4·32	21	18·42	20	30·77
	Foot Shaking	15	6·39	26	18·72	10	8·77	12	18·46
	Stamping	10	4·22	7	5·04	4	3·51	6	9·23
	Leg Shaking	30	12·66	21	15·11	18	15·79	7	10·77
	Posture Distortion like head bent low	42	17·72	27	19·42	15	13·16	7	10·77

A point worth noting is that 3 mannerisms occurred in blind boys and girls as well as sighted boys. The remaining 8 occurred in all the 4 groups.

Differences in regard to mannerisms, namely, nail biting and arm shaking, were significant at both the levels of confindence. Arm shaking was found more in blind children and nail biting in sighted children.

The data presented here bring out with considerable force the point that mannerisms tended to be spread across all the 4 groups. Sight did not appear to be germane to the prevalence of manneristic behaviour.

We now turn our attention to looking at the data from a different point of view. We divide the mannerisms into upper body mannerisms and lower body mannerisms. On this basis the score of the blind was 69·15% and that of the sighted was 67·60%. The difference was statistically insignificant.

In lower body mannerisms the blind obtained a score of 30·85% and the sighted 32.40%. Here again the difference was insignificant.

Detailed data are presented in Table 3·11.

TABLE 3·11

Sl. No.	Part of the Body	Blind Subject		Sighted Subject	
		No.	%	No.	%
1.	Upper Body	260	69·15	121	67·60
2.	Lower Body	116	30·85	58	32·40

Figure 3·5 displays the data graphically.

It is interesting to note that generally speaking girls showed fewer upper body mannerisms. The differences between blind boys and girls was satatistically significant at both levels of confidence while the difference between sighted boys and girls was found to be statistically insignificant.

Coming to lower body mannerisms, we find that girls showed a higher occurrence of lower body mannerisms. The difference between blind boys and girls was statistically significant at both levels while the difference between sighted boys and girls was insignificant.

Let us now turn our attention to the play situation where only blind children showed manneristic behaviour. The following Table 3·12 presents the data:

TABLE 3·12

GROUP	Mannerisms	Blind Subject			
		Boys		Girls	
		No.	%	No.	%
BLIND BOYS	Eye Poking & Rubbing	9	12·68	—	—
	Arm Shaking	5	7·04	—	—
	Jumping	2	2·81	—	—
	Kicking	1	1·41	—	—
	Stamping	2	2·81	—	—
BLIND GIRLS	—	—	—	—	—
BLIND BOYS	Head Movement	8	11·27	3	8·57
BLIND GIRLS	Face Contortion	2	2·81	1	2·86
	Tongue Wagging	3	4·23	1	2·86
	Clapping	5	7·04	1	2·86
	Finger Manipulation	6	8·45	7	20·00
	Nail Biting	1	1·41	2	5·71
	Body Rocking	5	7·04	2	5·71
	Swaying	1	1·41	1	2·86
	Foot Shaking	1	1·41	4	11·42
	Leg Shaking	6	8·45	1	2·86
	Posture Distortion like head bent low	14	19·72	2	34·29

It will be observed from the above Table that 5 mannerisms namely, eye poking and rubbing, arm shaking, jumping, kicking and stamping were found only in blind boys. Thumb sucking was not found in blind children. The remaining 11 were found in both boys and girls. Though most of the differences were not statistically significant, boys ranked higher in showing manneristic behaviour at play.

We had earlier stated that 4 mannerisms were found only in the blind subjects. We now consider the status of blind boys and girls on these 4 mannerisms.

Table 3·13 presents the data in the dining room situation.

TABLE 3·13

Sl. No.	GROUP	Mannerisms	Blind Boys		Blind Girls	
			No.	%	No.	%
1.	Blind Boys	Eye Poking and Rubbing	9	40·91	—	—
2.	Blnd Girls	—	—	—	—	—
3.	Blind Boys & Blind Girls.	Head Movement	13	59·09	2	100

It will be seen from the preceding table that in this situation only 2 mannerisms were seen, Eye Poking and rubbing was found only in boys.

However, head movement was found in both, girls ranking much higher than boys.

Table 3·14 presents data in the class room situation.

TABLE 3·14

Sl. No.	Group	Mannerism	Blind Boys		Blind Girl	
			No.	%	No.	%
1.	Blind Boys	—	—	—	—	—
2.	Blind Girls	—	—	—	—	—
3.	Blind Boys & Blind Girls	Head Movement	15	45·45	23	50·00
		Eye Poking and Rubbing	14	42·42	13	28·26
		Clapping	4	12·12	10	21·74

The above table shows that girls ranked higher in head movement and clapping while eye poking and rubbing was seen more in boys.

All the 4 mannerisms seen in the blind were found in the dormitory situation. Table 3.15 presents the data.

TABLE 3·15

Sl. No.	Group	Mannerisms	Blind Boys		Blind Girls	
			No.	%	No.	%
1	Blind Boys	—	—	—	—	—
2.	Blind Girls	—	—	—	—	—
3.	Blind Boys & Blind Girls	Head Movement	19	35·85	2	28·57
		Eye Poking and Rubbing	19	35·85	2	28·57
		Jumping	8	15·09	2	28·57
		Clapping	7	13·21	1	14·28

In this case boys and girls seem to be balanced. 2 mannerisms, namely, eye poking and rubbing and head movement were found more in boys, while clapping and jumping were seen more in girls.

Here again on account of the difficulties already pointed out in an earlier section, we count the observations made. Of 902 observations made in blind boys 132 showed manneristic behaviour. This works out to 11·97%. Of 384 observations made in girls 59 showed stereotypic behaviour giving a percentage of 14·32%. This means that girls ranked somewhat higher than boys.

CHAPTER 4

TEACHER INTERVENTION

As was stated in Chapter 1 a number of theories about possible measures to remedy manneristic behaviour are at present put forward. No strong evidence in favour of or against a given theory is yet available. The object of this study was not specifically to study remediation. Eradication of mannerisms must form the subject matter of an independent study.

Yet, this study would have been incomplete without some mention of what can be done to minimise manneristic behaviour in blind children. We felt that it would be useful for this study to ascertain in the views of the heads of schools where the study was carried out. The purpose was to determine whether in schools for the blind intervention was made and if so with what results. Accordingly, a very short questionnaire was circulated. The results are shown in table 4·1.

TABLE 4·1

Questions	Answers	
	Yes	No
1. Do your teachers explicitly advise their students to stop meaningless movements	6	0
2. Do the teachers discuss this issue with you in staff meetings	6	0
3. Do the teachers discuss this issue with parents/guardians	3	3
4. Have you noticed any improvement as a result of teacher intervention.	6	0
5. Please describe briefly what preventive measures you take. They may include:		
a. Punishment	2	4
b. Reward	4	2
c. Suggestion to the child	6	0
d. Suggestion to parents/ guardians	3	3
e. Extra stimulation	5	1
f. Alternate activity	4	2

It will be observed from the above table that in all the six cases the schools said that they did explicitly advise students to stop or to refrain from meaningless non-goal directed movements. This issue also comes up for discussion at staff meetings in all the schools. However, it appears that this issue is not discussed by every school with parents. But all schools informed us that they have noticed improvement as a result of teacher intervention.

The most effective method appears to be suggestions to children. Next in effectiveness is extra stimulation. Rewards and alternative activities are of equal importance. Punishment is the least effective measure.

This is of considerable significance for teachers. They will be well advised to take recourse to persuasive suggestion and explanation rather than to coercive methods. Coercion may only serve to heighten tension and, therefore, if mannerisms are caused by tension, punishment would only aggravate them.

For whatever they are worth, teacher observations tend to hint at the possible effectiveness of behaviour modification. This needs to be confirmed by a later study; nevertheless, the data given here could provide some useful guidelines for teachers and parents.

We were not able to secure similar responses from teachers of sighted children. But perhaps as this study has clearly shown blindness does not bring about fundamental changes in the functioning of the personality, similar remedial measures might, therefore, be effective with sighted children as well. However, sighted children given to manneristic behaviour do not always arouse an aversive response, nor are they stigmatized to the same degree.

CHAPTER 5

SUMMARY AND CONCLUSIONS

It has long been held in blindness literature that blind children show peculiar mannerisms, arousing in the sighted strong negative feelings. These mannerisms have sometimes been dubbed as 'blindisms'. Such a stigma impedes social acceptance and integration of the blind. This Institute decided therefore to investigate the issue. Accordingly, a list of 17 mannerisms to be observed was drawn up on the basis of a Pilot Study. Trained teachers of the blind who served as observers were exposed to an orientation course during which each form of manneristic behaviour was clearly defined.

Observation was then conducted in 6 schools for the blind in Ahmedabad, Aligarh, Delhi and Dehra Dun. Observations were also conducted in 3 schools for sighted children, 542 blind and 365 sighted childern were observed.

The subjects were matched for their educational level. No direct matching on socio-economic criteria was possible. However, all the children seem to live in a similar environment.

Techniques of purposive sampling were adopted. But, unfortunately, the numbers of blind and sighted children were not equal, nor were the numbers of boys and girls equal in the various situations.

The most significant finding was that 4 mannerisms namely, head movement, eye poking and rubbing, clapping and jumping were found only in blind children. These could, of course, be regarded as adaptative mannerisms. For example, clapping and jumping both help blind children in determining their bearings in the environment by echo location. Eye poking and rubbing may be caused by ocular irritation. Head movement might be the result of lack of visual feed back.

These are, however, only plausible explanations. There is no evidence to suggest that, save for eye poking and rubbing, the other 3 mannerisms could be directly traced to blindness. Thus only one mannerism could legitimately be traced directly to blindness.

We compared blind and sighted children on 13 mannerisms. It was found that various mannerisms occurred across the spectrum of groups. Taking an overall view, however, we found that sighted children ranked higher than blind children. These differences were statistically significant. Thus, to style mannerisms of blind children as "blindisms" appears completely unwaranted. Mannerisms would seem to be a human phenomenon caused possibly by some of the factors already indicated, though much study and experimentations are needed to clarify pertinent issues.

This conclusion is *a fortiori* supported by the finding that while sighted children ranked higher in two situations, blind children obtained a high score in one situation.

Taking a total view, sighted girls showed fewer mannerisms than sighted boys but blind girls scored higher than blind boys. Surely these differences cannot be attributed to the loss of vision, nor to innate sex differences. The reasons for the higher score of blind girls as compared with blind boys need to be investigated further. Lack of environmental stimulation might be implicated here, since in our culture, boys receive more parental attention than girls. Again, while sighted children showed no manneristic behaviour at play, blind children did so. While this could be due to a higher level of tension in blind children even at play, the precise reason requires to be studied in depth.

Yet, perhaps, blindness cannot be totally exonerated for, in all probability, eye poking and rubbing which did not find a place in the manneristic repertoire of sighted children, may well be triggered by some physiological condition in the eyes resulting from the disease that originally led to blindness. On the other hand it may have no nexus whatsoever with the physiological state. It's not unknown that when an organ with a high self connection gradient is impaired, for a very long time it becomes the focus of psycho somatic energy. The habit of eye poking and rubbing may thus be a manifestation of high tension rather than some ocular irritation even though blindness is implicated.

There is a genuine apprehension that if mannerisms are not eradicated at an early date, blind adults may experience rejection in the social and economic environment. It appears that the mannerisms of sighted children go unnoticed or arouse scant attention possibly because they are not

believed to be deviant. On the other hand, most sighted persons, atleast in the initial stages, go through considerable strain when they encounter a blind person. Blindness then is the dominant characteristic they are looking at, and in doing so, they associate every mannerism with blindness. Their self consciousness probably colours their perception.

To remedy this situation, sustained and enlightened public education is of crucial importance. It has to be brought home to teachers, employers and others that manneristic behaviour not only occurs in deviant children but also in normal children. It needs to be looked upon as one form of human behaviour. This fact only goes to reinforce the view that blind children are basically children and their behaviour is motivated by the same psycho somatic and environmental factors as actuate all children, whether deviant or not.

An interesting finding was that only blind children showed manneristic behaviour in the play situation. This might have the implication that blind children do not play in as relaxed an atmosphere as do sighted children. It suggests the need for developing more effective recreational techniques so that the play situation might genuinely become a cathartic agent for blind children.

We also tried to ascertain through a questionnaire the remedial measures adopted in the six schools for the blind we studied. We found that gentle suggestion and persuation was the most effective method. Next in order was extra stimulation. This finding seems to be in accord with the suggestions made by Cuts forth and Lowenfeld to the effect that mannerisms might be the result of lack of adequate stimulation and might be remedied by providing extra stimulation. Positive reinforcement and alternate activity were found to be equally effective.

These findings might help teachers in their effort to correct mannerisms at an early age. While it is important to educate public opinion it is equally important for teachers and parents to mould the behaviour of blind children in such a way as to maximize their social acceptability.

On the basis of our data our primary hypothesis that no significant differences would be found between blind and sighted children must be largely rejected. While on the whole, sighted children achieved a higher score on 13 mannerisms, in some situations blind children showed greater manneristic behaviour. Blind children showed four manner isms that were not found at all in sighted children, though, *prima facie* and on an *a priori* basis we cannot eliminate blindness as the agent for giving rise to eye poking and rubbing. However our secondary hypothesis to the effect that situational differences would be found was completely confirmed.

We had undertaken this study in the hope that it would serve as a guide to further action. We trust this purpose has been achieved.

CHAPTER 6

IMPLICATIONS FOR FURTHER STUDY

Mannerisms are of considerable social as well as economic significance in the rehabilitation of the blind. Indeed, they may have deep psychological meaning. In the circumstances in view of the very large population of blind and visually impaired people in this country and in view of the imperative need to integrate them into our social and economic fabric, a clearer understanding of manneristic behaviour and its remediation must receive a high priority on a continuing basis.

This study has thrown up certain preliminary conclusions. Many of these need to be tested further and confirmed by further studies. It has also thrown up certain problems which need to be carefully investigated in order to give us a deeper understanding of the phenomenon of manneristic behaviour.

The following areas would seem to require study:

1. The present study is based on observation. It is important to take a film of every child displaying manneristic behaviour and have it assessed by a panel of judges. Such a technique is likely to give us more reliable results.

2. In this study attention was given to the presence of certain mannerisms. However, a frequency study within a given time and situational frame was not made. A frequency study is also needed so that we have a clearer concept of how frequent and intense a given form of manneristic behaviour is in certain situations. This will also shed more light on the comparative behaviour patterns of blind and sighted children.

3. The aetiology of mannerisms is currently shrouded in controversy. Studies would be undertaken in depth to determine with greater accuracy causative factors.

4. Similarly the effectiveness of various empirical remedies now adopted needs to be investigated in greater depth. We could then offer to the teacher and the parent a more meaningful plan for correction.

5. Further studies are also needed in other situations specially the home. The object of such a study would be to discover the relationship between activity level and the prevalence and intensity of manneristic behaviour. Such a study would also throw light on the effects of parent-child relationships on manneristic behaviour.

6. Similarly, studies in greater depth should be undertaken to unearth causes for blind children displaying mannerisms at play and identify techniques of offering blind children forms of recreation, both passive and active, comparable to those in which sighted children get so absorbed that their tendency to display mannerisms is deeply influenced.

7. Further studies are needed to determine whether some forms of manneristic behaviour occur only in blind children. If so, what they are and what precisely is their aetiology should be definitely established.

8. The current study was limited to 17 mannerisms. It will be useful to take up more studies to determine whether any other significant mannerisms do occur in blind children. Comparative studies of the occurrence of these mannerisms in blind and sighted children matched for educational levels and socio-economic status would be of great value.

9. It has been asserted that mannerisms occurred frequently in mentally retarded and emotionally disturbed children. However, a comparative study of manneristic behaviour in different situations among blind, deaf and orthopaedically handicapped children should be undertaken.

10. Studies should be carried out to investigate manneristic behaviour of blind and sighted children in integrated settings.

11. Similar studies should be undertaken between blind and other groups of disabled children placed in integrated settings.

12. The role of behaviour modification in eradicating mannerisms in blind children should be studied and specific techniques that are found most effective clearly identified.

13. Similar studies should be carried out in depth to determine the role of the enrichment of sensory stimulation in eradicating manneristic behaviour.

14. Studies should be undertaken to determine the role of physical, social and emotional maturation in eradicating or diminishing manneristic behaviour. Comparative studies of children at school and employed adults at work might serve to clarify this issue.

15. Studies of blind and sighted children in controlled environments such as artificially created tension, fear, anxiety or excitement should be undertaken. Such studies are likely to yield valuable information regarding factors that contribute to the emergence and persistence of manneristic behaviour.

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